

The Anthomyid Genus *Pogonomyia* (Dip.).*

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The genus *Pogonomyia* was established by Rondani in 1870 (Bull. Soc. Ital., ii, 336, xxiii) for a single species, *alpicola*, which was designated as type; it came from Mont Cenis in the Alps. The main characters are repeated by Van der Wulp, *Biologia*, Dipt., ii, 334, 1896, and by Meade, *Desc. List. Br. Anth.*, London, 1897, p. 29. I translate the entire description from Rondani's *Prodomus Dipt. Ital.*, vi, 37, 1877:

"Eyes bare, almost contiguous on the front in male. Front prominent. Oral margin, especially at the sides of the epistoma, with dense erect beard. Antennae short, the second segment with rather long setulae; arista nearly bare. The hind calypter a little longer than the front one. Anterior crossvein directly behind the tip of the first vein; sixth vein rather long but not reaching the margin. Front and middle femora of ordinary structure, the hind ones with a row of setae below; middle tibiae with setae behind and on outer side; hind tibiae somewhat incurved toward tip. Apex of abdomen setose but not densely villous."

Dziedzicki and Schnabl (*Die Anthomyiden*, 1911, 196) admit several rather divergent species, so that the genus in their conception is difficult to define; they recognize two subgenera, *Pogonomyia* and *Pogonomyiella*.

Stein, in his classic work on North American Anthomyidae (*Berl. Ent. Zeitsch.*, xiii, 1897, 169, 170) mentioned two species found in the N. A. collections sent him. The first, from Idaho, he identified doubtfully as *alpicola*, a species with which he was not acquainted; the other he recognized only in two females and did not describe. As I furnished the Idaho material, most of it was returned to me, and I collected more specimens in the West in later years. Only a couple of years ago I sent some to Professor Bezzi, and he informed me that they were not the European *alpicola*, and sent me a pair of the latter to support his opinion. Later I found *alpicola* in Colorado.

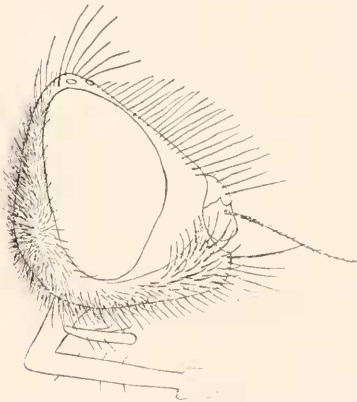
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Van der Wulp described (*loc. cit.*) a *Pogonomyia aterrima* from northern Mexico (Ciudad Durango, 8100 feet); as his description agrees and I have the northern species from as far south as Southern California, there is no reason to question that *aterrima* is the same as the Idaho species. I redescribe it farther on.

Stein's other North American species was even more unfortunate, as he described the male in the same paper under the name *Spilogaster nitens* (p. 199); quite recently, moreover, one of the females with Stein's label "*Pogonomyia n. sp.*" came under the eye of Mr. Malloch, and as he had the male he described the species under the name *Pogonomyia flavinervis*. This synonymy I made out from the type of *nitens* (which, by the way, is from Toronto and not Massachusetts as Stein gives it); it has been rubbed on the most accessible side of the head, and consequently does not show as many bristles on the epistoma as is characteristic of the genus, which doubtless explains the mistake.

Generic Characters. *Alpicola* shows the following characters in both sexes, which I consider of generic importance (see figure of head):

Entirely shining or subshining black color; epistoma strongly produced and upturned, the vibrissae above the lower edge of the head; bucca and back of head with abundant long bushy hairs; sides of epistoma with bushy hairs, some of which are directed upward; parafacial wide; front prominent, antennae short, the arista nearly bare; eyes bare; acrostichals merely hairs except the hindmost pair; calypters unequal, the hind ones rather



Pogonomyia alpicola —Head of Male.

strongly projecting behind the front ones; halteres black; scutellum bare below; dorsum of abdomen bearing rather

numerous long, slender, upright bristles, irregularly arranged except a row along the hind edge of each segment; hind tibia bearing among others a row of strong bristles down the inner hind side; no costal spine; third and fourth veins almost parallel; sixth vein well developed at base, becoming evanescent and disappearing at about two-thirds the distance to the margin.

The male has a narrow front and the female has cruciate frontals; but these are less important characters than some at least of the preceding list.

Schnabl and Dziedzicki include two species with yellow halteres, one with plumose arista, one with wide front in male. We are not concerned with these at present. The four species herein treated agree very well in characters, and unquestionably belong together. The genus belongs to Phaoninae, differing from *Phaonia* mainly in the protuberant epistoma with up-curved bristles, the black halteres and the general intense black color. Most Phaonias have hairy eyes, and none of the forty species in my collection has black halteres.

Table of Species. Male and Female.

1. Parafacial as wide as the length of the third antennal joint; front tibia with 4 bristles on outer hind side in male, 3 in female....2
Parafacial narrower than length of third antennal joint; front tibia with 2 bristles on outer hind side (rarely 3 in female)....3
2. Front of male twice as wide as distance between hind ocelli; mid basitarsus with two rows of stout spines below, which in the male are longer than the width of the joint, in the female not quite so long (Colorado).....**spinitarsis** n. sp.
Front of male not as wide as the distance between the hind ocelli, mid basitarsus in both sexes without unusual spines (Europe, Colorado) **alpicola** Rondani
3. Eastern species (Ontario to Wisconsin and Illinois); parafacials surpassing the width but not equaling the length of the third antennal joint; palpi elongate; wings yellow, especially the veins; abdomen in male brownish-gray pollinose with narrow median black stripe **nitens** Stein
Western species (British Columbia to Mexico and Colorado); parafacials as wide as third antennal joint; palpi usually not elongate; wings infuscated; abdomen subshining black,
aterrima Van der Wulp

Pogonomyia aterrima V. d. Wulp.

Van der Wulp, *Biologia*, Dipt., ii, 334, 1896.

Stein, *Berl. Ent. Zeitsch.*, xiii, 169, 1897 (? *alpicola*).

♂. (First see generic characters and table of species above.)

Wholly black, mostly subshining. Front only slightly protuberant below, at the narrowest above about as wide as the distance between the hind ocelli; orbits silvery, very narrow; about 12 pairs of erect frontal bristles, beginning slightly below ocelli; second antennal joint with three or four long erect hairs; parafacial silvery, about as wide as third antennal joint; transverse impression extending narrowly below the eye, very distinctly set off from the shining, bushy-haired bucca, which extends forward to form the side of the protuberant epistoma; front edge of epistoma forms a sharp projecting rim; palpi of ordinary size, with a few hairs; proboscis rather slender, with ordinary labella; back of head flat above, bulging below, covered with bushy hair.

Thorax above with very thin brown pruinosity, almost shining, its hairs erect and long, not very numerous, its bristles large; post dc 3, ant dc 2, inta 2, supa 2, posta 2, hum 3, inthum 1, presut 1, npl 2; stpl 1 large behind and one more slender in front, together with several irregular slender ones. Mesopleura hairy and bristly above a diagonal line from the upper anterior to the lower posterior angle; pteropleura and metapleura bare. Scutellum with one marginal and one apical pair of bristles, the latter close together. Calypters and their fringe white.

Abdomen moderately broad and flat, the two middle segments about $2\frac{1}{2}$ times as wide as long; hypopygium small, rounded, turned under, both its segments subshining, the first with rather coarse, the second with very fine hair; inner forceps (obere Zangen, D. & S.) short and blunt, the outer (untere Zangen, D. & S.—homologous with the accessory plates of Parker's and my Sarcophagid work) shining brown, stout, not tapering, almost truncate at tip, straight, the hind edge excised to fit against the inner forceps. Fifth sternite not much developed, with a shallow excision apically.

Middle femur with a row of bristles on the whole length of the front lower edge, smaller at tip where there are some larger above them; and on apical third of front lower edge a row of about 5, beginning large and decreasing. Hind femur with an entire row of long bristles below, another on the upper front edge, and one on the hind side which dwindles toward tip. Front tibia with three setae on outer hind edge; middle tibia with about eight on outer hind side, three on inner hind side, one small or none on outer front side; hind tibia with a strong row on outer hind side, another on inner hind side, four or five on outer front side (well outwardly), and usually a few erect hairs on inner front side. Pulvilli grayish brown moderately elongated, on the front feet only.

Wings strongly blackened on front and basal portion.

Length 5.5-6 mm.

♀. Front nearly as wide as one eye, velvet black, a shining triangle in front of the ocelli; parafrontals and parafacials wider than in male; frontal bristles eight or nine, large. Middle tibia with three or four setae on outer front side, otherwise as in male; hind tibia without erect hairs on inner front side. Wings slightly and rather evenly infuscated. Length 6-7 mm.

84 specimens, of both sexes: SASKATCHEWAN: 2 Farewell Creek, August, 1907. IDAHO: 11 Moscow, April 23 to May 22; 1 Craig's Mt., June 21-25, 1894; 2 Lawyer's Canyon, June 16, 1909. CALIFORNIA: 5 Claremont (C. F. Baker). COLORADO: 61 Tennessee Pass, July 24-26, 1917.

Variations: The cruciate frontal bristles of the female are sometimes absent; some females show the palpi lengthened as in *nitens*; the pubescence of the arista is occasionally almost as long as in *nitens*.

Pogonomyia nitens Stein.

Stein, Berl. Ent. Zeitsch., xiii, 199, 1897 (*Spilogaster*).

Malloch, Bull. Ill. St. Lab. Nat. Hist., 1915, 356 (*flavinerzis*).

This species differs from *aterrima* in so few characters that a full description is superfluous. The main differences have already been presented in tabular form; I should add that the palpi in *nitens* are longer and more slender than is usually the case in *aterrima*.

Ten specimens, both sexes: one female, Algonquin, Illinois, paratype of *flavinerzis*, from Mr. Malloch; eight specimens, Polk County, Wisconsin, collected many years ago by Prof. C. F. Baker, which I found in the collections at Stanford University; one female, Waubamic, Ontario, June 14, 1915 (H. A. Parrish, Coll.), furnished by Professor Melander.

I have also seen several Wisconsin specimens in the collections of Professors Marshall and Wilson, in the University of Wisconsin, and Mr. Malloch recently informs me that he has a long series from Illinois; but I have never found it in Indiana. All of the recorded dates of collection are in quite early summer, and this is also true for *aterrima* if the altitude is considered.

Pogonomyia alpicola.

Rondani, Bull. Soc. Ent. Ital., ii, 337, 1870; Prod. Dipt. Ital., vi, 33, 1877 (both male only).

Pokorny, Verh. Zool.-Bot. Ges. Wien, xliii, 7, 1893 (female).

See list of generic characters already given, and also table of species. Front of male at narrowest somewhat wider than the anterior ocellus, widening rapidly toward antennae; in female about a third the head-width above, slightly more anteriorly. Parafacials silvery, parafrontals not; side of epistoma with about 20 long upcurved bristles in male only 6 or 8 shorter in female.

Thorax and abdomen black with thin brownish pruinosity, same in both sexes, and upright long hairs in male which are but little developed in female. Chaetotaxy: ps dc 3 or 4, ant dc 2, acr in female only a prescutellar pair, in male numerous tall hairs in front, those behind the suture becoming somewhat like slender bristles; hum 2 or 3, npl 2, intal 2, supal 1 and a long prealar, scutellum with 2 lateral and 1 apical, postal 2, mesopleura and sternopleura in male with abundant long hair approximating the length of bristles, no distinct separation between them and the few bristles; in the female stpl 3, mspl with a row behind and 2 or 3 in front. Calypters white with pale yellow rim and fringe.

Abdomen unstriped, fourth segment longest in female, sternites in male with long, dense hair. Mid tibia of male with 3 bristles on outer front side, 5-6 on outer hind, 6-8 on inner hind, 4-5 slender on inner front; the female has one or two less in each of these rows. Hind tibia of male with numerous rows of bristles standing in all directions except directly toward the flexor and extensor surfaces, especially a few characteristic erect, long hairs on inner and outer flexor, an incipient "villosity"; the calcar is one of a row on the inner extensor side. The female has on the hind tibia only three rows—4 in meso-extensor, 5 on latero-extensor, and 5-6 on latero-flexor. A slight spine below on hind basitarsus. Wing strongly infuscated at base, gradually less so toward apex, no costal spine.

Length 6 to 7½ mm.

Two males, one female, Tennessee Pass, Colorado, July 24-26, 1917; one male, one female, Europe, from Professor Bezzi.

Pogonomyia spinitarsis n. sp.

Closely allied to *alpicola*, from which it differs by the characters given in the table and a few others. The upcurved bristles of the epistoma are only about 8 in male, 5 in female; arista with very short pubescence; palpi short.

Thorax of male not with the striking long hair of *alpicola* male,